

IN THE CLAIMS

This following listing of claims will replace all prior versions, and listings of claims in the application.

Listing of Claims:

1.-7. (Cancelled)

8. (Currently Amended) A method of determining a corrected concentration of an analyte contained in a specimen comprising a blood substitute interferent and a non-blood substitute interferent, said method comprising the steps of:

- i) providing a first calibration algorithm for said blood substitute interferent, a second calibration algorithm for a said non-blood substitute interferent, a first linear equation defining a relationship between a measured concentration of said analyte and a concentration of said blood substitute interferent, and a second linear equation defining a relationship between a measured concentration of said analyte and a concentration of said non-blood substitute interferent, said first and second calibration algorithms developed using a calibration set comprising variable amounts of said blood substitute interferent and said non-blood substitute interferent;
- ii) measuring an absorbance or reflectance of radiation of said specimen, wherein said measuring is performed in the absence of any reaction step that generates a chromophore within said specimen;
- iii) using said first and second calibration algorithms and said absorbance or reflectance measured in step (ii) to calculate a concentration of said blood

substitute interferent and a concentration of said non-blood substitute interferent in said specimen; followed by

- iv) determining an initial concentration of said analyte in said specimen with an analyzer, and
- v) using said first and second linear equations from step (i), said concentrations from step (iii), and said initial concentration from step (iv), to determine said corrected concentration of said analyte.

9. (Cancelled)

10. (Previously Presented) The method of claim 8, wherein said analyte is selected from the group consisting of Na, K, Cl, HCO₃, Ca, Mg, creatinine, urea, total protein, gamma glutamyl transferase (GGT), aspartate amino transferase (AST), lactate dehydrogenase (LDH), creatine kinase (CK), alkaline phosphatase (ALP) and total bilirubin (Tbili).

11. (Previously Presented) The method of claim 8 wherein reflectance is used in step (ii).

12. (Previously Presented) The method of claim 8 wherein the radiation is in the range of 474-910 nm.

13.-22. (Cancelled)

23. (Previously Presented) The method of claim 8 wherein absorbance is used in step (ii).

24.-26. (Cancelled)

27. (Previously Presented) The method of claim 8, wherein said non-blood substitute interferent is selected from the group consisting of haemoglobin (Hb), bilirubin (BR), biliverdin (BV), turbidity and a mixture thereof.

28.-33. (Cancelled)

34. (Previously Presented) The method of claim 8, wherein said blood substitute interferent is cross-linked hemoglobin.

35.-37.(Cancelled)

38. (New) A method of determining a corrected concentration of an analyte contained in a specimen comprising a blood substitute interferent, said method comprising:

- i) providing a calibration algorithm for said blood substitute interferent and a linear equation defining a relationship between a measured concentration of said analyte and a concentration of said blood substitute interferent, said calibration algorithm developed using a calibration set comprising variable amounts of said blood substitute interferent;
- ii) measuring an absorbance or reflectance of radiation of said specimen, wherein said measuring is performed in the absence of any reaction step that generates a chromophore within said specimen;
- iii) using said calibration algorithm and said absorbance or reflectance measured in step (ii) to calculate a concentration of said blood substitute interferent; followed by
- iv) determining an initial concentration of said analyte in said specimen with an analyzer, and

- v) using said linear equation from step (i), said concentration from step (iii), and said initial concentration from step (iv), to determine said corrected concentration of said analyte.

39. (New) The method of claim 38, wherein said analyte is selected from the group consisting of Na, K, Cl, HCO₃, Ca, Mg, creatinine, urea, total protein, gamma glutamyl transferase (GGT), aspartate amino transferase (AST), lactate dehydrogenase (LDH), creatine kinase (CK), alkaline phosphatase (ALP) and total bilirubin (Tbili).

40. (New) The method of claim 38, wherein reflectance is used in step (ii).

41. (New) The method of claim 38, wherein the radiation is in the range of 474-910 nm.

42. (New) The method of claim 38, wherein absorbance is used in step (ii).

43. (New) The method of claim 38, wherein said blood substitute interferent is cross-linked hemoglobin.